

**[0525] CLAIMS**

1. A foam comprising a liquid phase and a gas phase wherein  
the liquid phase comprises at least one sclerosing agent and  
5 the gas phase consists essentially of gaseous nitrogen present in an  
amount ranging from 0.0001% to 0.8% by volume and at least one  
physiologically acceptable gas.
2. The foam of claim 1, wherein the gaseous nitrogen is present in  
an amount ranging from 0.001% to 0.8%.
- 10 3. The foam of claim 1, wherein the gaseous nitrogen is present in  
an amount ranging from 0.01% to 0.8%.
4. The foam of claim 1, wherein the gaseous nitrogen is present in  
an amount ranging from 0.01% to 0.7%.
5. The foam of claim 1, wherein the gaseous nitrogen is present in  
15 an amount ranging from 0.01% to 0.6%.
6. The foam of claim 1, wherein the at least one other  
physiologically acceptable gas is chosen from oxygen, carbon dioxide and  
mixtures thereof.
7. The foam of claim 1, wherein the foam has a density less than  
20 0.25 g/cm and half life of greater than 100 secs.
8. The foam of claim 1, wherein the half life is at least 120  
seconds.
9. The foam of claim 1, wherein the half life is at least 150  
seconds.
- 25 10. The foam of claim 1, wherein the half life is at least 180  
seconds.
11. The foam of claim 1, wherein the density ranges from 0.07 to  
0.22 g/ml.
12. The foam of claim 1, wherein the density ranges from 0.07 to  
30 0.19 g/ml.
13. The foam of claim 1, wherein the density ranges from 0.07 to  
0.16 g/ml.
14. The foam of claim 1, wherein the density ranges from 0.08 to  
0.14 g/ml.

15. The foam of claim 1, wherein the at least one sclerosing agent is chosen from polidocanol, glycerol and sodium tetradecyl sulphate.

16. The foam of claim 1, wherein the at least one sclerosing agent is polidocanol.

5 17. The foam of claim 1, wherein the polidocanol is present in a concentration ranging from 0.5 to 4% vol/vol in the liquid phase.

18. A canister, the contents of which consist of a liquid component and a gas component, maintained at above atmospheric pressure, wherein:

10 the liquid phase comprises at least one sclerosing agent and the gas phase consisting essentially of gaseous nitrogen present in an amount ranging from 0.0001% to 0.8% by volume and at least one physiologically acceptable gas.

15 19. The canister of claim 18, further comprising a foam generating element with at least one aperture formed therein, the at least one aperture having maximum dimensions ranging from 0.1 to 200 micron.

20. The canister of claim 19, wherein the at least one aperture has maximum dimensions ranging from 1 to 50 micron.

20 21. The canister of claim 20, wherein the at least one aperture has maximum dimensions ranging from 2 to 30 micron.

22. The canister of claim 21, wherein the at least one aperture has maximum dimensions ranging from 3 to 10 micron.

23. The canister of claim 22, wherein the at least one aperture has maximum dimensions of about 5 micron.

25 24. The canister of claim 20, wherein the at least one aperture has a maximum dimension of 3 to 10 micron, and wherein the at least one other physiologically acceptable gas is from 1 to 40% carbon dioxide and the remaining gas is substantially oxygen.

30 25. The canister of claim 20, wherein the at least one other physiologically acceptable gas is from 10 and 30% carbon dioxide gas and the remaining gas is substantially oxygen.

26. A method of making a canister of claim 18 comprising:

(a) flushing the canister with a gas mixture essentially comprising the other physiological acceptable gas;

35 (b) introducing the at least one sclerosing agent sclerosing agent into the canister either before or after step (a);

(c) pressurising the canister to a first predetermined pressure above atmospheric pressure from a source of the other physiological acceptable gas whose level of nitrogen contamination is between 0.0001% and 0.5%.

5        27.     The method of claim 26, further comprising the step of partially exhausting the contents of the canister, followed by re-pressurising the canister from the same or a different source of the other physiologically acceptable gas whose level of nitrogen contamination is between 0.0001% and 0.5%.

10       28.     The method of claim 26, wherein the pressure in the canister is maintained at or above the surrounding atmospheric pressure.

29.     A method for angiologic treatment comprising injecting the foam as described in claim 1 into vessels to be treated.

15       30.     The method of claim 39 comprising having a patient breathe oxygen or an oxygen enriched atmosphere for a predetermined period prior to injecting the foam.

31.     The method for phlebologic treatment comprising injecting the foam as described in claim 1 into vessels to be treated.

20       32.     The method of claim 31 comprising having a patient breathe oxygen or an oxygen enriched atmosphere for a predetermined period prior to injecting the foam.

33.     The method of claim 32, wherein substantially the entire greater saphenous vein of one leg of a human patient is treated by a single injection of foam.

25       34.     The method of claim 33, wherein the single injection uses an amount ranging from 10ml and 50ml.

35.     The method of claim 34, wherein the single injection uses an amount ranging from 10ml and 40ml.

36.     The method of claim 35, wherein the single injection uses an amount ranging from 15ml and 30ml.